WHAT IS CLAIMED IS:

1. A routing processing method in a packet transmission for an input packet as an object for routing, comprising the steps of:

performing a process for identifying an application adapting for transmission of an input packet;

performing a process for setting a timer value preliminarily provided for the identified application;

performing a process for routing to determine a port of transmission destination on the basis of a destination address stored in a routing table; and

performing a process for abandoning a packet or transferring the packet to a predetermined route adapting the identified application when routing process cannot be completed exceeding the set timer value.

2. A packet transmission routing processing system performing a routing process for an input packet as a routing object, comprising:

parsing and timer processing means for identifying an application corresponding to transmission of an input packet and monitoring a timer value preliminarily provided for said application; and

routing and transferring means for determining a port of a transmission destination on the basis of a destination address stored in a routing table, and disposing the packet or transferring the packet to a preliminarily determined

route adapting to the identified application when routing process is continued beyond the timer value monitored by said parsing and timer processing means.

3. A packet transmission routing processing system as set forth in claim 2, wherein said parsing and timer processing means and said routing and transferring processing means comprises:

a packet accumulating portion accumulating said input packet;

a packet parsing portion performing parsing for identifying the application corresponding to the packet from said packet accumulating portion and reading out of a destination address;

a packet waiting portion waiting the packet from said packet parsing portion and transmitting the packet in response to a packet output command;

packet transferring portion for transferring the packet output from the packet waiting portion to a packet output port on the basis of a transmission destination designation and next process designation;

a timer value determining portion outputting a timer value and a next process code corresponding to the application identified by said packet parsing portion;

a monitoring timer portion outputting a time out signal upon termination of measurement of the timer value from said timer value determining portion; and

a routing retrieving portion outputting a packet output designation signal to the packet waiting portion and outputting a transfer path number and a process code to said packet transferring portion when the routing process based on the destination address from said timer value parsing portion or a time out signal is input from said monitoring timer portion.

4. A packet transmission routing processing system as set forth in claim 3, wherein said timer value is a timer for executing a predetermined process when routing retrieval is not completed within a period designated by the timer value; and

said next processing code is a code designating the process of packet to be object for the routing process when retrieving process in said routing retrieving portion is not completed within the period designated by the timer value.

5. A packet transmission routing process system as set forth in claim 4, wherein said predetermined process in said timer value is to terminate the routing process irrespective of normal or abnormal of the result of process within the period designated by the routing retrieval period of the timer value, and

the process of the packet in the next process code is abandonment of the packet or transferring to a predetermined path when the transmission destination cannot be determined.

6. A packet transmission routing process system as set forth in claim 3, wherein, as said monitoring timer portion, a counter is employed, said counter outputs a time out signal generated by measuring said timer value from said timer value determining portion to said routing retrieving portion.

7. A packet transmission routing processing system as set forth in claim 3, wherein said timer value determining portion comprises:

an application judgment portion for generating an address at a value the same as an application identification number from the packet parsing portion or a value derived by multiplying or dividing said application identification number by an integer; and

a random access memory reading out the preliminarily stored timer value and the next process code for outputting to said monitoring timer and said routing retrieving portion corresponding to the address from said application judgment portion.

8. A packet transmission routing processing system as set forth in claim 3, wherein said timer value determining portion comprises:

a content-addressable memory storing said application identification number, said timer value and said next process code in combination, said content-addressable memory outputs

the timer value and the next process code stored therein on the basis of the input application identification number.

9. A packet transmission routing processing system as set forth in claim 7, wherein said random access memory is a detachable and rewritable storage element.

10. A packet transmission routing processing system as set forth in claim 7, which further includes input operation and storage processing means for rewriting said timer value in said random access memory.

11. A packet transmission routing processing system as set forth in claim 7, which further includes an external storage data modifying device connected to said random access memory for rewriting the timer value.

12. A packet transmission routing processing system as set forth in claim 7, which further includes an external storage data modifying and communicating device receiving a designation data from a communication network for modifying said timer value of said random access memory.

13. A packet transmission routing processing system as set forth in claim 3, wherein said routing retrieving portion comprises a processing unit including a microprocessor or a digital signal processor executing a sequence for

outputting a packet output command signal to the packet waiting signal, and outputting a transfer path number and the process code to said packet transferring portion when the routing process based on the destination address from the packet paring portion is completed or after input of the time out signal from said monitoring timer.

14. A packet transmission routing processing system as set forth in claim 3, wherein the application identified by said parsing and timer processing means is at least an internet telephone protocol in a TCP/IP communication network.

15. A packet transmission routing processing system as set forth in claim 2, wherein said timer value is a period for obtaining clarity of telephone conversation in a TCP/IP communication network.

16. A packet transmission routing processing system as set forth in claim 15, wherein the period to obtain clarity in said telephone conversation is in a range of 10 msec. to 50 msec.

17. A packet transmission routing processing system as set forth in claim 8, wherein said content-addressable memory is a detachable and rewritable storage element.

18. A packet transmission routing processing system as set

forth in claim 8, which further includes input operation and storage processing means for rewriting said timer value in said content-addressable memory.

19. A packet transmission routing processing system as set forth in claim 8, which further includes an external storage data modifying device connected to said content-addressable memory for rewriting the timer value.

20. A packet transmission routing processing system as set forth in claim 8, which further includes an external storage data modifying and communicating device receiving a designation data from a communication network for modifying said timer value of said content-addressable memory.